**Problem Set #4**
*Due on Friday, 8 February, 2008.*

**1.** Exercise 1H.5 *[5]*

**2.** Exercise 1H.8 *[5]*

*Note:* In solving both exercises, you may assume, if you find it useful to do so, that earlier exercises in the text are true.

### Death is a Matter of Mathematics

Death is a matter of mathematics.

It screeches down at you from dirtywhite nothingness
And your life is a question of velocity and altitude,
With allowances for wind and the quick, relentless pull of gravity.

Or else it lies concealed
In that fleecy, peaceful puff of cloud ahead,
A streamlined, muttering vulture, waiting
To swoop upon you with a rush of steel.
And then your chances vary as the curves
Of your parabolas, your banks, your dives,
The scientific soundness of your choice
Of what to push or pull, and how, and when.

Or perhaps you walk oblivious in a wood,
Or crawl flat-bellied over the pockmarked earth,
And Death awaits you in a field-gray tunic.
Sights upright and aligned. Range estimated
And set in. A lightning, subconscious calculation
Of trajectory and deflection. With you the focal point,
The centre of the problem. The *A* and *B*
Or Smith and Jones of schoolboy textbooks.

Ten out of ten means you are dead.

*Barry Amiel*